Explanation of Significant Differences

MIG/DeWane Landfill Superfund Site
Belvidere, Boone County, Illinois
Illinois EPA #0070050002
U.S. EPA # ILD980497788

Landfill Cover Modification

Prepared by:
Illinois Environmental Protection Agency
Springfield, Illinois

July 2013

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Approved by:

Lisa Bonnett

Lisa Bonnett, Director
Illinois Environmental Protection Agency

Date: 8/15/13

Daniel C. Cronin

for Richard C. Karl, Director
Superfund Division
U.S. EPA Region 5

Date: 8/30/2013

Introduction to the Site and Statement of Purpose

The Illinois Environmental Protection Agency (Illinois EPA), in consultation with the United States Environmental Protection Agency (U.S. EPA), is issuing this Explanation of Significant Differences (ESD) for the MIG/DeWane Landfill Superfund site in Belvidere, Boone County, Illinois (**Figure 1**). The purpose of this ESD is to document a change in the landfill cover component of the remedy selected in the Record of Decision (ROD). The ROD was signed by Illinois EPA on March 30, 2000 with U.S. EPA concurrence on March 31, 2000.

The remediation at the MIG/DeWane Landfill Superfund site is being conducted by the potentially responsible parties (PRPs) pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, and the National Contingency Plan (NCP). The Illinois EPA is the lead agency for the MIG/DeWane Landfill Superfund site; U.S. EPA is the support agency. CERCLA Section 117(c), 42 U.S.C. Section 9617(c), and 40 C.F.R. 300.435(c)(2)(i) of the NCP authorize the publishing of an ESD when the differences in the remedial action to be taken significantly change, but do not fundamentally alter, the remedy selected in the remedial decision.

The modified landfill cover remedy is based on new and significant information collected since the ROD was issued. This new information, provided in the *Technical Memorandum, Modified Remedy, MIG/DeWane Landfill Superfund Site* (Tech Memo), dated December 5, 2012 and prepared by Geosyntec Consultants (Geosyntec), includes significant additional Interim Remedial Measures (IRM) landfill cover thickness measurement data, leachate level measurement data, and groundwater quality data. These data document: (i) a substantial IRM landfill cover thickness consisting of an average of 11.5 feet of compacted clay on the landfill crest and an average of 3.8 feet of compacted clay on the landfill side slopes; (ii) a modeled hydraulic efficiency (98%), which is essentially equivalent to the ROD remedy landfill cover, and which has been empirically demonstrated by a significant lowering of leachate levels (an average 2-foot reduction in leachate levels between 1995 and 2008); and (iii) significant groundwater quality improvement since the Remedial Investigation (RI) was completed in 1999.

The planned landfill cover modification does not fundamentally alter the previously selected landfill cover component of the remedy for MIG/DeWane Landfill as discussed in the ROD. Therefore, a ROD amendment is not required and the change can be documented via an ESD. This ESD will become part of the administrative record file for the site, as noted in the NCP at 40 C.F.R. 300.825(a)(2).

The site repository and Administrative Record file may be found at the local public library or the offices of the Illinois EPA and U.S. EPA:

Ida Public Library
320 North State Street
Belvidere, Illinois 61008 (Information Repository)
Hours: Monday to Friday 10 am to 8 pm, Saturday 10 am to 5 pm

U.S. EPA Records Center
77 W. Jackson Blvd.
Room 7 South
Chicago, Illinois 60604 (Administrative Record)
Hours: Monday to Friday 8:00 am to 4:00 pm

Illinois EPA
Bureau of Land
1021 North Grand Avenue East
Springfield, Illinois 62702 (Administrative Record)
Hours: Monday to Friday 8:30 am to 5:00 pm

Site History, Contamination, and Selected Remedy

The MIG/DeWane Landfill Superfund site is located in Boone County, Illinois approximately 0.25 miles east of the City of Belvidere and 0.5 miles north of Business U.S. Route 20 (**Figure 2**). The MIG/DeWane Landfill site occupies an area of approximately 47 acres and rises to a height of approximately 50 to 55 feet above the surrounding terrain. The site consists of a landfill and a leachate surface impoundment. The surface impoundment was constructed to receive leachate from the landfill's gravity flow leachate collection system. The MIG/DeWane Landfill is classified as a Type I landfill that received residential, municipal, commercial, and industrial wastes for disposal.

The site was proposed for addition to the National Priorities List (NPL), 40 CFR Part 300, Appendix B, in 1989, and was listed on August 30, 1990. This listing stemmed from a 1984 sampling inspection at the site by a U.S. EPA contractor that determined that landfill leachate was contaminating surrounding media. In June 1988, a court-ordered injunction was issued against M.I.G. Investments, the landfill operating company for being in violation of its landfill operating permit. The landfill operator abandoned the site in July 1988.

The site has a history of removal and interim actions conducted to mitigate leachate and landfill gas migration. One of these IRMs included a placement of an interim landfill cap to provide additional cover over the landfill waste. This action reduced the rate of infiltration into the landfill thus reducing leachate generation and groundwater contamination.

The Baseline Risk Assessment (Human Health and Ecological) was finalized in March 1997 and the Remedial Investigation Report was finalized in July 1997. Groundwater was not identified in the Baseline Risk Assessment as a primary media of concern for human health or ecological pathways. The groundwater between the landfill and the Kishwaukee River is not presently, and is not likely in the future (due to institutional controls and property access restrictions), to be used as a potable water supply. As documented by data collected during the RI, the groundwater downgradient of the landfill Site discharges to the Kishwaukee River. However, the RI groundwater sampling determined that contaminated groundwater from the landfill was not impacting the river. More recent results indicate that is still the case.

The selected remedy in the March 2000 ROD for the site included construction and operation of

a leachate collection and monitoring system, construction and operation of an active and passive landfill gas collection system and monitoring program, leachate surface impoundment closure, surface water diversion, implementation of access restrictions and institutional controls, natural attenuation of groundwater, long-term groundwater monitoring, and construction of a new multi-layer landfill cap to cover and contain landfill wastes and minimize infiltration of precipitation to reduce leachate generation.

Additional information concerning the scope of contamination and remedy development may be found in the Administrative Record file.

Basis for the Significant Difference

New information, including existing landfill cover thickness measurements, leachate levels, and groundwater data that have been collected and evaluated since the ROD was issued supports making improvements to the existing IRM landfill cover rather than installing a new cover system as described in the ROD. The modification to the landfill cover component of the ROD remedy is the only change presented in this ESD.

Eighty-six individual clay thickness data points were used to assess the thickness of the IRM landfill clay cover, 23 measurement points were collected from the top (crest) of the landfill and 63 of the measurement points were collected from the landfill side slopes. The topsoil thickness measurements from these data points were not included in the clay cover thickness assessment. The data indicated that the IRM landfill clay cover top (crest) averages 11.5 feet thick with some locations up to 19 feet thick. These data included clay thickness soil boring data from 41 gas vents and 17 dual-phase gas wells installed in 2008, data from 24 Geoprobe® soil borings advanced in 2006 to assess the cover thickness, and data from 4 gas probes installed in 1993 during the RI.

The clay cover thickness data points include the combined thickness of the IRM landfill cover, which consists of the low permeability layer and the grading layer (not the topsoil). The low permeability layer and the grading layer were visually indistinguishable when collecting the soil boring data during above-mentioned installation activities. The two layers were not able to be distinguished due to several contributing factors including their common source, composition, compaction degree, and water content.

These cover thickness measurement data are presented in the Geosyntec Tech Memo. The measured IRM landfill cover minimum, maximum, and calculated average thickness data for the landfill crest, the landfill side slopes, and the entire landfill are summarized in Table 1 (next page).

Table 1			
Measured/Calculated	**IRM Landfill Cover Thickness (feet)**		
	Landfill Crest	**Landfill Side Slopes**	**Entire Landfill**
Maximum	19.0	12.5	19.0
Average	11.5	3.8	5.8
Minimum	5.0	1.5	1.5

The measured IRM landfill cover thickness was 3.0 feet or greater at 60 of 86 measurement locations and 2.0 feet or greater at 77 of the 86 measurement locations. **Figure 3** illustrates the extent of the cover thickness greater than 3.0 feet (approximately 28 acres or 57% of the landfill cover), greater than 2.0 feet and less than 3.0 feet (approximately 15 acres or 33% of the landfill cover), and limited areas less than 2.0 feet (only approximately 4 acres or 9% of the landfill cover). The significant thickness of the soil cover on the crest, as much as 19.0 feet, is the result of the significant quantity of IRM grading layer soil used to fill the flat and depressed areas of the landfill prior to the IRM compacted clay cover construction.

Aerial photographs taken in 2011 of the IRM landfill cover depict that uniform and dense vegetative growth has been established, there is no ponding, and no evidence of significant erosion. This is indicative of a landfill cover configuration that effectively promotes runoff while minimizing cover erosion.

Hydraulic efficiency is a parameter that is used to quantify the effectiveness of cover systems in minimizing water infiltration into the landfill waste. Reducing water infiltration through the cover system into the landfill waste provides long-term control of the quantity of leachate generated and subsequently reduces the potential for migration of leachate constituents to groundwater. Hydraulic efficiency is the percent of infiltration that is blocked by the cover; therefore, the highest possible hydraulic efficiency is 100%. Hydraulic efficiency was calculated for four landfill covers (ROD, existing IRM, improved IRM, and Generic Illinois Administrative Code [IAC] § 811) using the Hydrologic Evaluation of Landfill Performance (HELP) computer model developed by the U.S. Army Corps of Engineers for the U.S. EPA.

When modeled, the existing IRM landfill cover thickness measurement data indicate that the hydraulic efficiency or effectiveness of the existing IRM landfill cover is more than 98%. The hydraulic efficiency was modeled using the areas of the slopes with differing thicknesses (t) and a subset of the results is presented below:

- t < 2 feet has a hydraulic efficiency of 98.03%
- t = 2-3 feet has a hydraulic efficiency of 98.10%
- t = 3-5 feet has a hydraulic efficiency of 98.15%

Based on HELP model results shown above and provided in the Geosyntec Tech Memo, after increasing the thickness of the IRM landfill cover on the side slopes to 3 feet as planned in the modified remedy, the composite hydraulic efficiency for the side slope will remain

approximately 98%. That is, the existing IRM landfill cover and the improved IRM landfill cover are at least 98% effective in reducing infiltration into the landfill.

The ROD remedy landfill cover is estimated to have a hydraulic efficiency of 99% and the Generic IAC § 811 landfill cover is estimated to a have a hydraulic efficiency of 95%. These results indicate that the IRM landfill cover and the proposed improved IRM landfill cover are more effective in reducing infiltration into the landfill waste than the generic IAC § 811 soil cover and that the IRM landfill cover effectiveness is essentially equivalent to the ROD remedy landfill cover.

New leachate level data indicate a lowering of the leachate level since the IRM landfill cover construction. This demonstrates that the existing IRM landfill cover has been effective in reducing infiltration of precipitation into the landfill by promoting precipitation runoff and evapotranspiration and by eliminating ponding on the landfill. Leachate level measurement data were collected from 34 gas vents and 14 dual-phase gas wells in 2008 (approximately 15 years after the existing IRM landfill cover installation). These data were compared to 1995 leachate level information. The leachate level data calculations provided in the Geosyntec Tech Memo indicate that leachate levels in the landfill have been lowered an average of approximately two (2) feet between 1995 and 2008.

Figure 4 depicts two cross-sections comparing the 1995 and 2008 leachate level data. The relative increases in leachate at the side slopes from 1995 to 2008 which are illustrated in the cross-section in **Figure 4,** are likely caused by the lack of data points along these areas from 1995. However, any increase or build-up of leachate at the side slopes of the landfill will be mitigated with the installation of the leachate collection system described in the ROD remedy. The ROD remedy includes leachate collection trenches along the side slopes which would convey leachate from these areas for treatment and/or disposal.

Further evidence of a reduction of leachate generation and leachate levels in the landfill is that the leachate surface impoundment, which receives leachate from the landfill's existing leachate collection system, is essentially dry. This demonstrates the effectiveness of the existing IRM landfill cover in reducing infiltration into the landfill and subsequent leachate generation.

Recent groundwater sampling data indicate a significant improvement in groundwater quality since the RI. Groundwater sampling was conducted in April 2010, December 2010 and December 2011. The RI groundwater data collected during the RI indicated that benzene, 1,1-dichloroethene (DCE), 1,2-dicholopropane (DCP), trichloroethene (TCE), tetrachloroethene (PCE), and vinyl chloride (VC) were detected above their respective U.S. EPA Maximum Contaminant Levels (MCL) or Illinois State Class I Groundwater Standards (ICGS) in one or more monitoring wells. The 2010/2011 groundwater sample laboratory analytical results indicated that benzene was the only organic contaminant of concern (CoC) detected at a concentration greater than MCLs or ICGSs in one monitoring well. A comparison of the recent groundwater analytical data to the RI data (from 1993, 1994, and 1995) is depicted on **Figure 5.**

Historically, five (5) metals have been detected at groundwater monitoring well locations at concentrations greater than their respective MCLs (antimony, arsenic, chromium, lead, and mercury) and 10 metals have been detected at concentrations greater than their respective ICGSs (antimony, arsenic, boron, chromium, iron, lead, mercury, magnesium, nickel, zinc). During the April and December 2010 and December 2011 groundwater monitoring events only arsenic was detected above its MCL and only five (5) metals were detected above their respective ICGSs (arsenic, boron, iron, manganese, and nickel). Further, these metals were typically detected at concentrations just exceeding (within same order of magnitude of) their respective MCLs/ICGSs. The organic and inorganic CoC groundwater quality improvement demonstrates that the IRM landfill cover's hydraulic efficiency has been effective in improving groundwater quality.

Description of Significant Differences

The modified remedy includes changing the landfill cover component of the ROD remedy. There will be no other changes to the ROD remedy. A summary of the ROD remedy and modified remedy components is presented below:

Remedy Component	**ROD Remedy**	**Modified Remedy**
leachate collection and monitoring system	✓	✓
active and passive landfill gas collection system and monitoring program	✓	✓
leachate surface impoundment closure	✓	✓
surface water diversion system	✓	✓
access restrictions and institutional controls	✓	✓
natural attenuation of groundwater	✓	✓
long-term groundwater monitoring	✓	✓
long-term operation and maintenance program	✓	✓
new landfill cover system	new multi-layer landfill cover	***improve existing IRM landfill cover***

The modified remedy includes making improvements to the existing IRM landfill cover instead of constructing the new multi-layer landfill cover system called for in the ROD remedy. The improvements include placing additional compacted clay cover in areas on the side slopes where the cover thickness is less than three (3) feet and grading of the IRM landfill crest to establish a minimum slope of three (3) percent, consistent with the ROD remedy. The improved and graded areas will receive a minimum of six (6) inches of topsoil and be seeded to establish and sustain vegetative growth. No other modifications are being made to the ROD remedy.

A summary comparison of the landfill cover components of the ROD remedy and the modified remedy is presented below:

ROD Remedy Landfill Cover Component	Modified Remedy Landfill Cover Component
▪ ***Soil Protection and Vegetative Layer*** - minimum 2 ½ feet thick on the crest of the landfill with a taper to a minimum of 2 feet at the toe of the slope. ▪ ***Drainage Layer*** - geosynthetic (geonet and geotextile). ▪ ***Barrier Layer*** - geosynthetic clay liner (GCL), bentonite between a geosynthetic flexible membrane and a geotextile. ▪ ***Subsoil/Grading Layer*** - minimum 12 inches thick to provide protective base for Barrier Layer (re-compacted IRM cover material). ▪ Minimum final grade of the total cover system of 3 percent.	▪ ***Existing IRM landfill cover*** - consisting of an average of 11.5 feet compacted clay and topsoil on the landfill crest and an average of 3.8 feet of compacted clay and topsoil on side slopes. The IRM landfill cover generally consists of the following components: ✓ Variable thickness grading layer; ✓ 2-foot thick minimum compacted low-permeability clay soil layer; ✓ 6-inch thick topsoil/vegetation soil layer; and ✓ Established vegetation. ▪ ***IRM landfill cover improvements*** - placing additional compacted clay cover in areas on the side slopes where the cover is less than 3 feet thick and grading of the crest to establish a minimum slope of 3 percent. The improved and graded areas would receive a minimum of 6 inches of topsoil and seeded to establish and sustain vegetative growth.

The ROD identified IAC § 807 and IAC § 811/814 as ARARs for the landfill cover component of the remedy. The ROD documented that Illinois EPA and U.S. EPA consider that IAC § 807 is applicable and that IAC § 811/814 are relevant and appropriate. The new and significant data document that the average thickness of the IRM landfill cover is 5.8 feet and 57% of the cover is greater than three (3) feet thick. The modified remedy landfill cover component (proposed improved IRM landfill cover) would include placing additional compacted clay cover in those areas on the side slopes where the cover is less than three (3) feet thick. The improved areas would also receive a minimum of six (6) inches of topsoil to establish and maintain vegetative growth. Therefore, the modified landfill cover remedy substantially meets the IAC § 807 final cover requirements and the IAC § 811/814 three (3) foot thick low-permeability layer requirement.

The modified landfill cover remedy would have greater short-term effectiveness than the ROD landfill cover remedy because the modified remedy would:

- Significantly reduce the period needed to implement the modified remedy. It is estimated that the modified remedy landfill cover component could be implemented approximately one year faster than the ROD landfill cover remedy.

- Significantly less land area would be disturbed for the modified remedy compared to the ROD remedy. Approximately 19.3 acres would need to be disturbed to bring the clay cover thickness to 3 feet or greater under the modified remedy, instead of the entire landfill (47 acres) as specified in the ROD remedy.

- Significantly reduce the short-term risk posed to workers, the community and the environment during construction compared to the ROD remedy. The ROD remedy landfill cover would require removal of six (6) inches of topsoil and regrading of the underlying compacted clay that would be replaced by a vegetative/protective layer over a drainage layer and GCL. It is anticipated that the onsite borrow area located west of the landfill, and previously used to provide soil for the IRM landfill cover, would be utilized for the landfill cover improvements of the modified landfill cover. It is estimated that the ROD remedy landfill cover would require 4,000 to 6,000 additional truckloads to place an additional 115,000 cubic yards of vegetative/protective layer soil above the drainage layer and GCL. Further, if a new borrow area cannot be developed south of the site, the cover soil would have to be imported from an offsite location. All of the above factors would increase the traffic (accident) risk along the onsite and offsite travel routes compared to the modified landfill cover remedy. In addition, construction of the ROD remedy landfill cover would increase the potential for dust generation which could potentially affect downwind residences. This is significant considering that approximately 1,500 people live within one (1) mile of the site and nearby residences within Wycliffe Estates are located within approximately 800 feet from the landfill.

- Limit potentially substantial rainfall infiltration and subsequent leachate generation during the construction compared to the ROD remedy landfill cover while a portion of the vegetation and topsoil of the IRM landfill cover is removed and the new cover is constructed.

The modified remedy utilizes the significant thickness of the existing IRM landfill cover to meet the functional objectives of the drainage layer, barrier layer, or subsoil grading layer.

The modified remedy would reduce the consumption of fossil fuels and associated emissions of greenhouse gases (GHG) and air pollutant emissions compared to the ROD remedy as follows:

- It is estimated that the modified remedy could be implemented approximately one year faster than the ROD remedy, significantly reducing the use of heavy construction equipment onsite and the consumption of fossil fuels and associated emissions.

- It is estimated that the ROD remedy would require an estimated 4,000 to 6,000 additional truck loads to haul an additional 115,000 cubic yards of landfill cover materials. Further, if a new borrow area cannot be developed south of the site, this cover soil would need to be imported from an offsite location further increasing the consumption of fossil fuels and associated emissions.

- The modified remedy significantly limits potentially substantial rainfall infiltration and subsequent leachate generation during the construction compared to the ROD Remedy (while a portion of the vegetation and topsoil of the IRM landfill cover is removed and the new cover is constructed). This reduces the quantity of leachate that would be collected by the leachate collection system and potentially require off-site hauling (and further consumption of fossil fuels and associated emissions).

The cost of the modified landfill cover remedy is expected to be approximately 30 percent less than the ROD landfill cover remedy. The modified remedy landfill cover effectiveness is essentially equivalent to the ROD remedy landfill cover as previously discussed. Therefore, the modified remedy is more cost effective than the ROD remedy because the modified remedy has the same effectiveness, but costs about 30 percent less.

Evaluation of Alternatives

This section is not applicable to ESDs.

Support Agency Comments - Illinois EPA is lead agency and U.S. EPA is the support agency for the MIG/DeWane Landfill site. U.S. EPA has reviewed and provided comments on this ESD.

Statutory Determinations

The ROD remedy satisfies the requirements of Section 121 of CERCLA, 42 U.S.C. Section 9621, which are to protect human health and the environment; comply with applicable or relevant and appropriate requirements (ARAR); be cost effective; and utilize permanent solutions and alternate treatment technologies to the maximum extent practicable. The ROD remedy partially satisfies the statutory preference for treatment as a principal element of the remedy; however, treatment is not considered to be practicable for all the landfill waste due to the large volume and heterogeneous distribution of waste at the site. Leachate from the site will be collected and then treated.

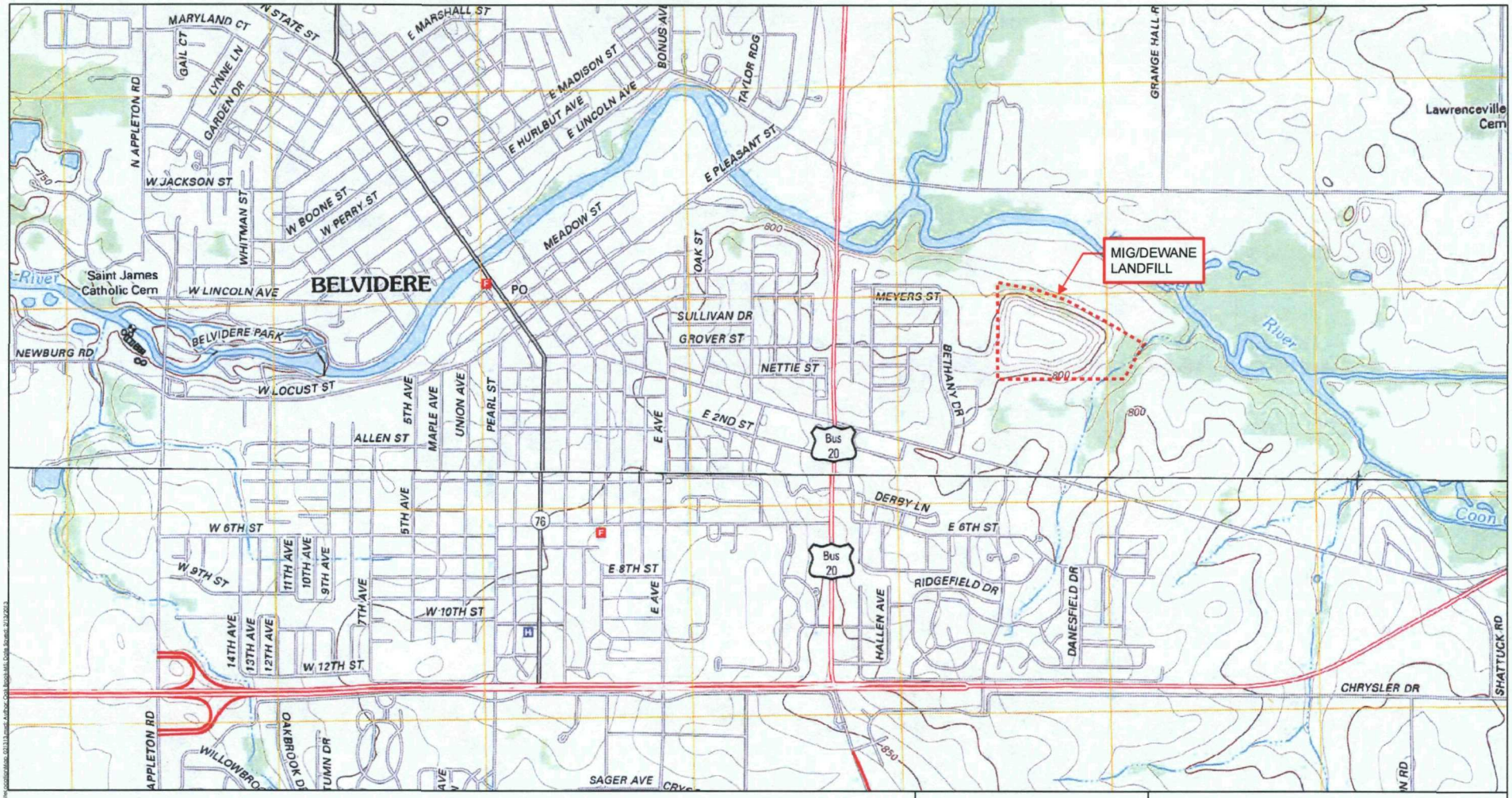
The modified landfill cover remedy as described in this ESD continues to meet CERCLA's requirements. Therefore, Illinois EPA and U.S. EPA have determined that this change to the landfill cover component of the ROD remedy satisfies CERCLA Section 121.

Because the modified remedy, like the ROD Remedy, will result in hazardous substances, pollutants or contaminants remaining on-site above levels that allow for unrestricted use, statutory five-year reviews will be conducted for the site in accordance with CERCLA Section 121 to ensure that the remedy is, or remains protective of human health and the environment.

Public Participation Compliance

Illinois EPA will publish in the local newspaper a notice of availability and brief description of the ESD. This ESD and supporting information will be made available to the public by placing it in the Administrative Record and the site Information Repository (noted elsewhere in this document). Although modified from the ROD remedy, the remedy does not present a fundamental change in scope or purpose of this action. Therefore, a formal comment period will not be conducted, but a public availability session will be planned. By so doing, Illinois EPA will meet the public participation requirements of NCP Section 300.435(c)(2)(i).

FIGURES



800 400 0 800 Feet

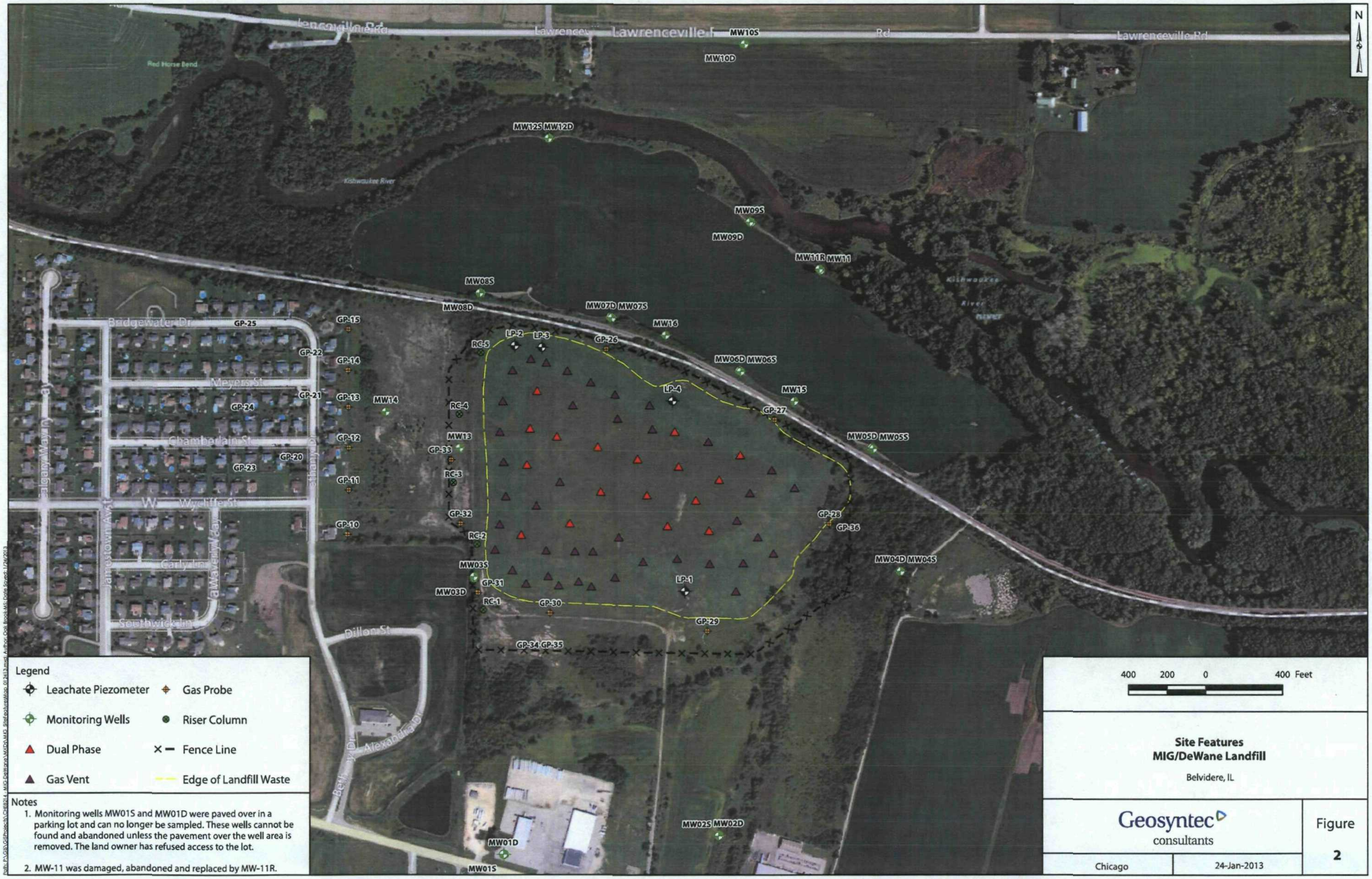
Site Location
MIG/DeWane Landfill
Belvidere, IL

Basemap Source: USGS 7.5 minute quadrangele maps Belvidere North and Belvidere South

Geosyntec consultants

Chicago | 13-Feb-2013

Figure 1


Lawrenceville Rd
MW10S
MW10D
Red Horse Bend
MW12S MW12D
Kishwaukee River
MW09S
MW09D
MW11R MW11
MW08S
MW08D
MW07D MW07S
MW16
MW06D MW06S
MW15
MW05D MW05S
MW04D MW04S
MW14
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GP-26
GP-27
GP-28
GP-29
GP-30
GP-31
GP-32
GP-33
GP-34 GP-35
GP-36
Bridgewater Dr
Meyers St
Chamberlain St
Wycliffe St
Carly Ln
Southwick Ln
Jamestown Ave
Dillon St
Alexandria Dr
N
400 200 0 400 Feet

Legend

- Leachate Piezometer
- Monitoring Wells
- Dual Phase
- Gas Vent
- Gas Probe
- Riser Column
- Fence Line
- Edge of Landfill Waste

Notes
1. Monitoring wells MW01S and MW01D were paved over in a parking lot and can no longer be sampled. These wells cannot be found and abandoned unless the pavement over the well area is removed. The land owner has refused access to the lot.

2. MW-11 was damaged, abandoned and replaced by MW-11R.

Site Features
MIG/DeWane Landfill

Belvidere, IL

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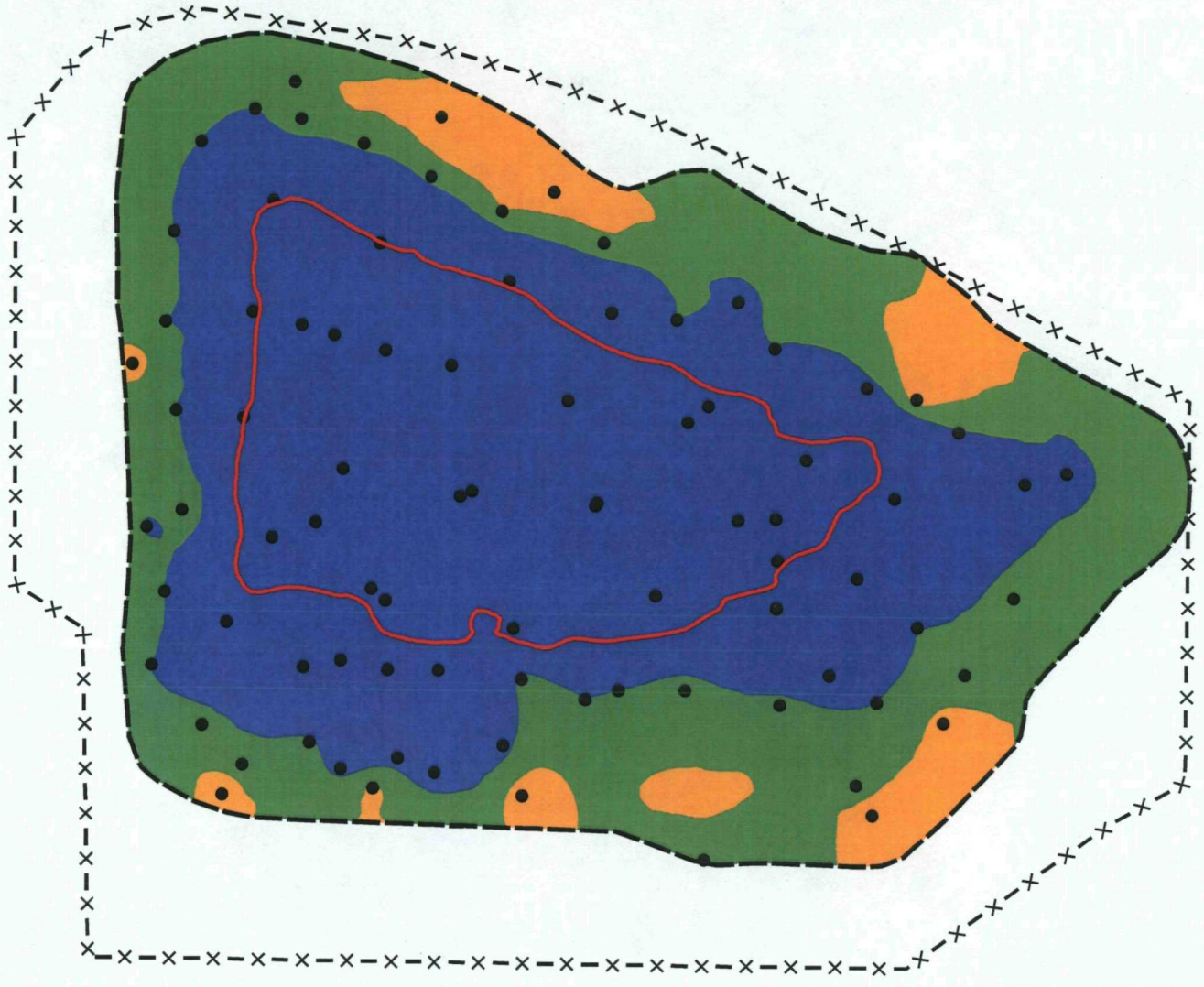
Chicago | 24-Jan-2013

Figure 2



Legend

Clay Cover Thickness (ft)
- <2
- 2-3
- >3

- Edge of Landfill Waste
- Measuring Point
- Top of Landfill
- Fence Line

200 100 0 200 Feet

N

IRM Landfill Cover Thickness Map
MIG/DeWane Landfill
Belvidere, IL

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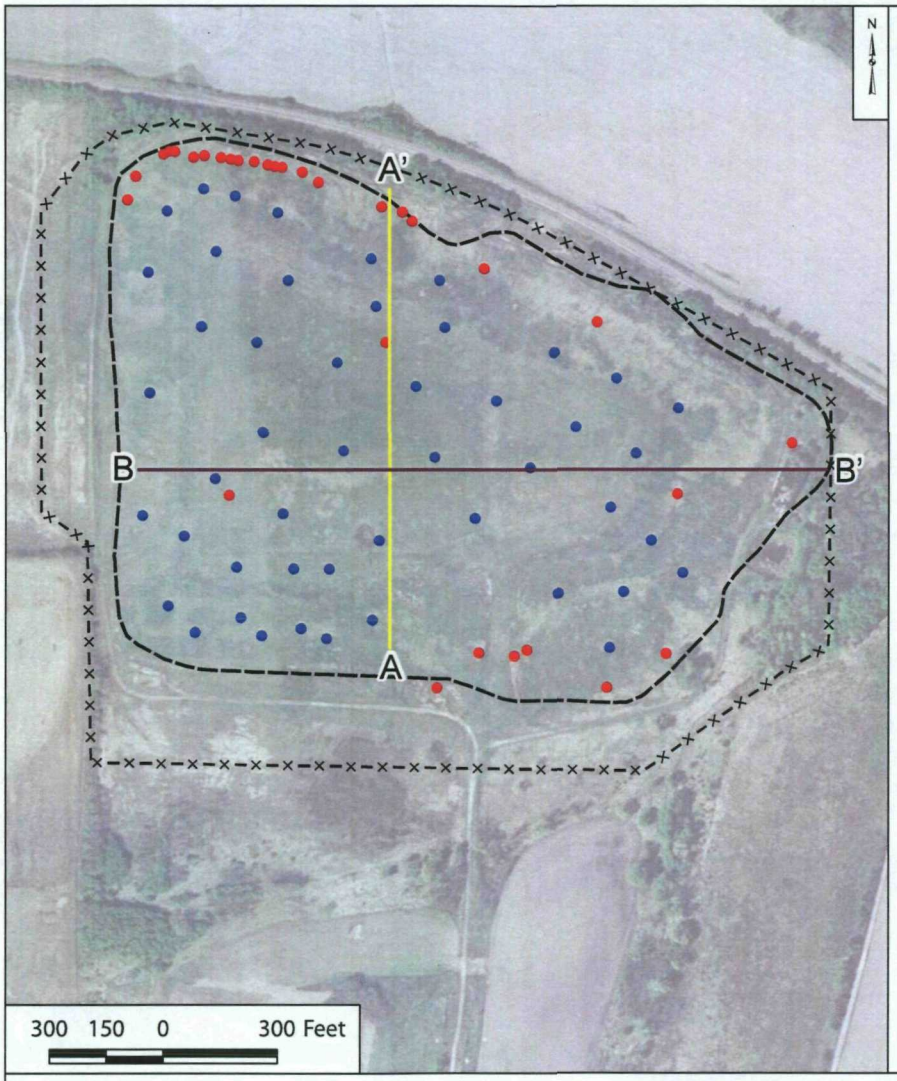
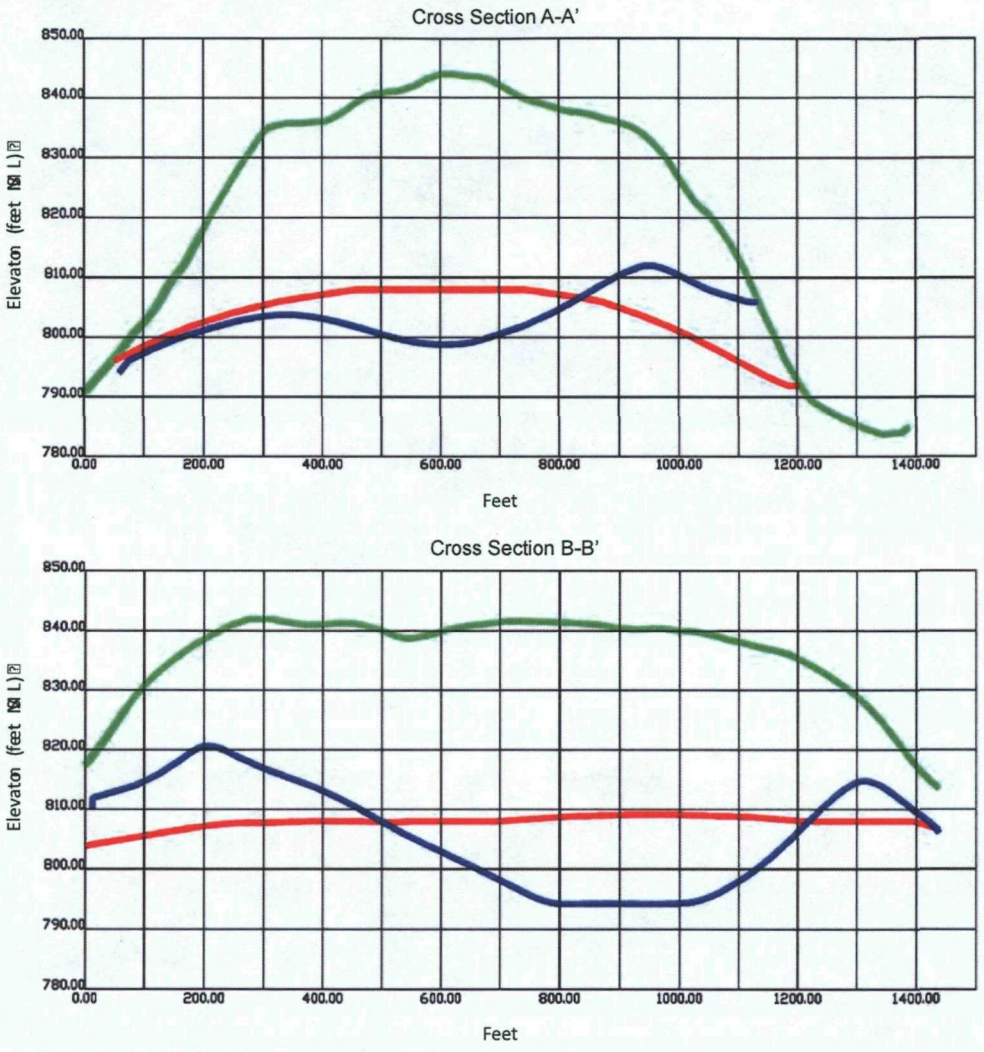
Chicago | 02-Apr-2012

Figure 3





Legend

- Fence Line
- Edge of Landfill Waste
- 1995 Leachate Measurements
- 2008 Leachate Measurements
- Cross Section A
- Cross Section B
- Existing Ground Surface
- Leachate Surface 2008
- Leachate Surface 1995

Notes

1. 1995 leachate surface determined by seep locations and two leachate wells on landfill crest.
2. 2008 leachate surface based on leachate elevation measurements in gas vents and dual-phase gas wells.

Landfill Leachate Level Cross Sections
MIG/DeWane Landfill, Belvidere, IL

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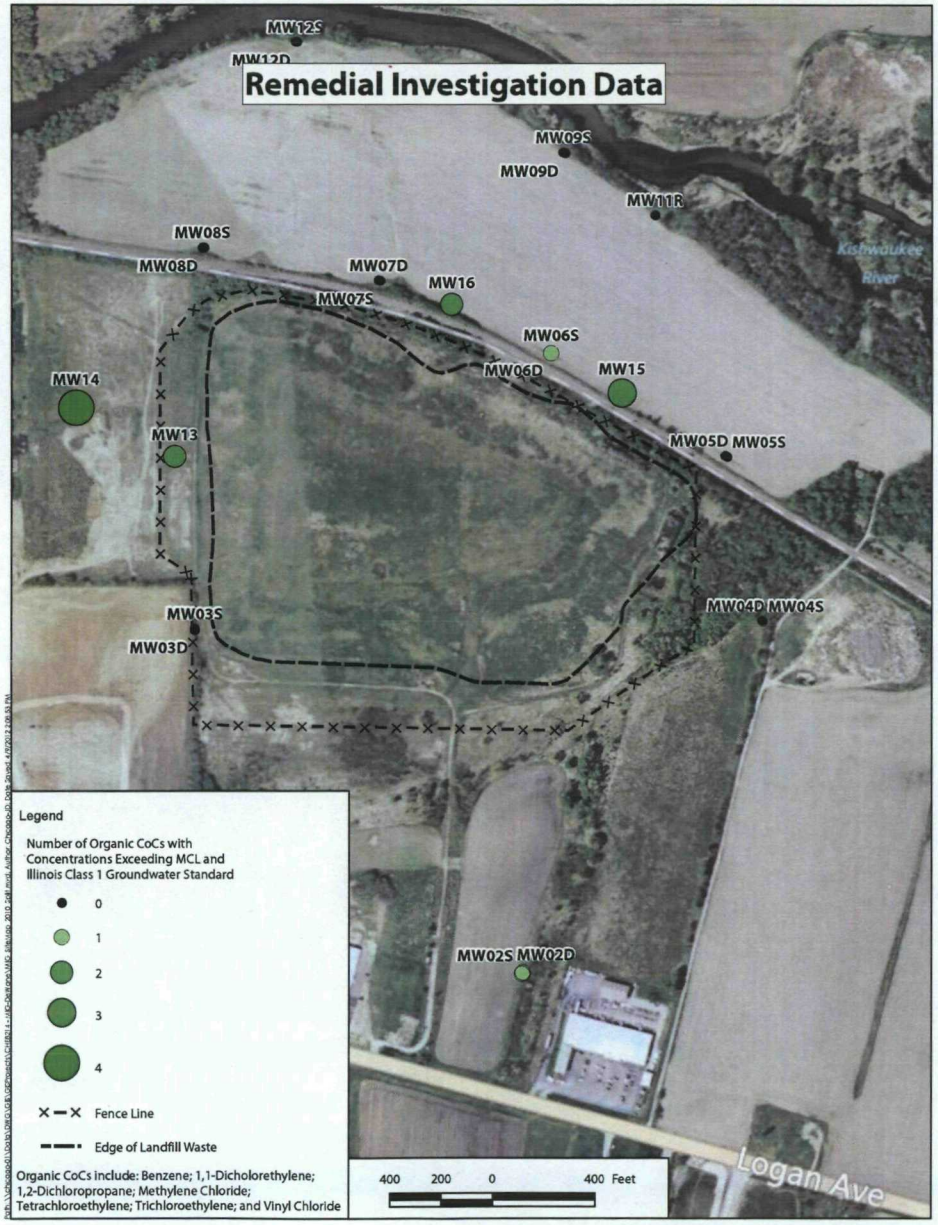
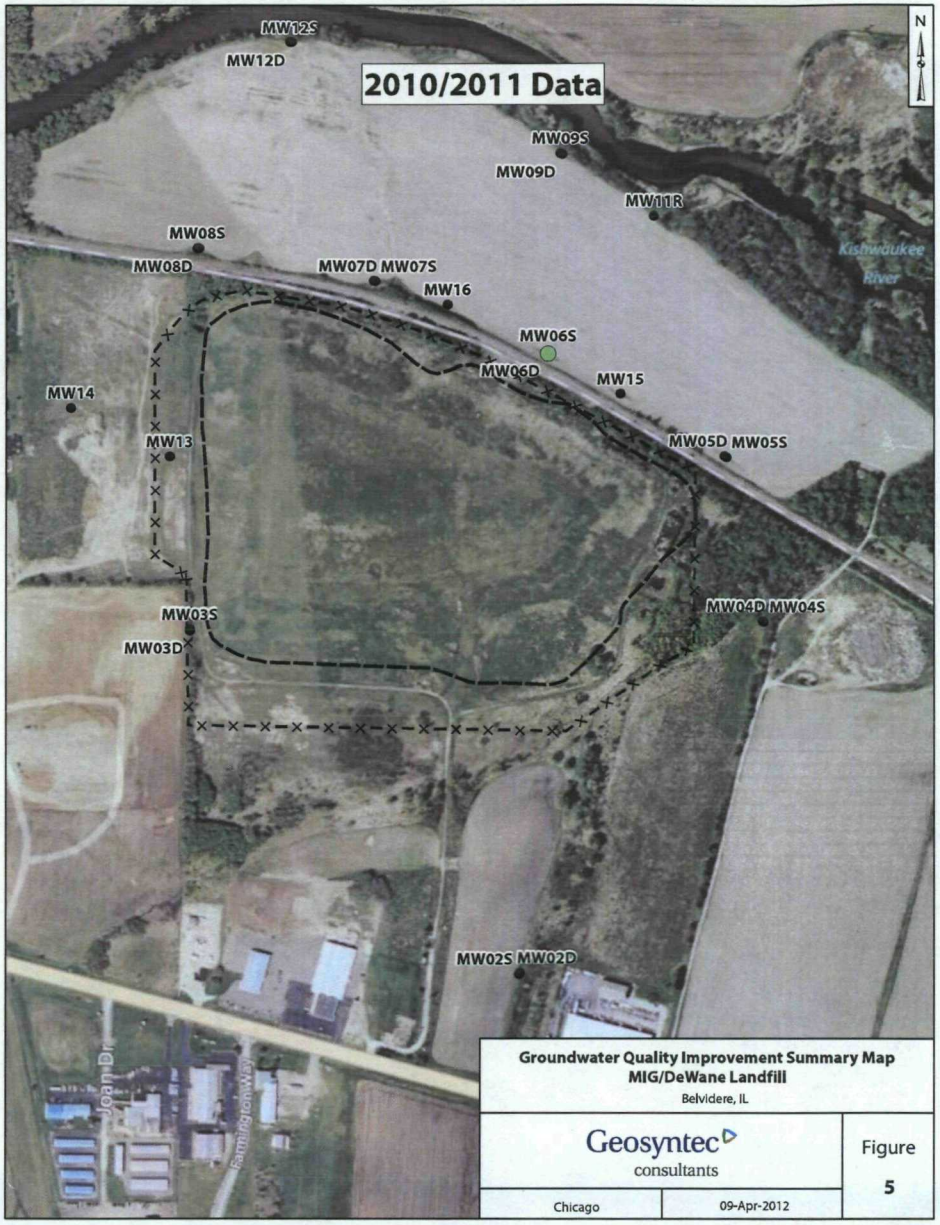
Chicago | 08-May-2012

Figure 4





Groundwater Quality Improvement Summary Map
MIG/DeWane Landfill
Belvidere, IL

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Chicago | 09-Apr-2012

Figure 5